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FREE PARKS

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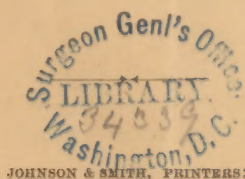
For the Sick and Debilitated Children of Large Cities
During the Summer Months.

BY J. M. TONER, M. D.,
WASHINGTON, D. C.

INFANT MORTALITY,

BY H. C. HAND, M. D.,
ST. PAUL, MINN.,

EDITOR OF THE NORTHWESTERN MEDICAL AND SURGICAL JOURNAL.



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FREE PARKS AND CAMPING GROUNDS; OR SANITARIUMS FOR THE SICK AND DEBILITATED CHILDREN OF LARGE CITIES, DURING THE SUMMER MONTHS.*

BY J. M. TONER, M. D., WASHINGTON, D. C.

The great mortality which has occurred among children in most of our large cities, during the recent "heated term," although, perhaps not much in excess of the ratio of previous years during the summer months, has fortunately, however, this season, attracted the attention of the public and the press. I am, therefore, hopeful, that good will result from the very general discussion the subject of the health of children in large cities has received.

Many admirable articles and valuable suggestions, in the interest of the health and lives of these little ones, have appeared in magazines and in the daily papers of the cities of New York and Philadelphia, from physicians, sanitarians, and philanthropists.

It is to be hoped that the consideration of this important question will not be dropped, until the public are made familiar with the facts of the perilous risks that exist to infantile life in populous and crowded cities, and the inauguration of some measure adequate to arrest or greatly lessen the frightful mortality.

A careful examination of the published reports of the Boards of Health of the cities of New York, Chicago, Philadelphia, Boston, Baltimore, and others, show that about one-half of all deaths reported as occurring in them, are of children under five years of age. It is also noticeable that a large per cent. of these deaths are attributed to cholera infantum and other summer complaints.

*From Northwestern Medical and Surgical Journal, Nov. 1872.

This waste of human life in its early years is unnatural. Humanity demands that the causes of it be inquired into, and as far as practicable removed.

In the published reports of the Board of Health of New York City from 1804 to 1853, inclusive, there were 365,508 deaths reported, of whom 184,534 were under five years of age ; which is 50.49 per cent. of the whole. For the three years, 1866-67, and 1869, the whole number of deaths reported was 69,816, of whom 35,301 were under 5 years of age, which is 50.57 per cent. of the aggregate mortality.

In the city of Chicago, from 1843 to 1869, inclusive, the published reports give 63,538 as the whole number of deaths, of whom 32,550 were under 5 years of age, which is 51.24 per cent. of all deaths reported.

In Philadelphia, from 1858 to 1870, inclusive, (except 1859) or in twelve years, 175,683 deaths were reported, of whom 79,519 were under 5 years of age, which is 45.26 per cent. of the whole number.

In Baltimore, in 1860, '62, '65, '66, and 1869, five years, the reports of the Board of Health give 26,854 deaths, of whom 12,636 were under 5 years of age, which is 47.06 per cent, of the whole number.

In Rhode Island, in 1852, '53, '54, '64, '65, '67, and 1868, seven years, the reports give 16,660 deaths, of whom 5,545 were under 5 years, which is 34.52 per cent. of the whole number.

In the city of Providence, in 1865, '66, '67, and 1870, four years, the reports give 4,470 deaths, of whom 1,540 were under 5 years, which is 34.45 per cent. of the whole number.

I have not within my reach complete files of the Reports of the Boards of Health of our different cities, or I might give a synopsis of them bearing upon this point, but the results would be simply cumulative of those given, and of what has been stated.

Fortunately for our race and the country, this decimating rate of mortality among the young, is not equally great in the smaller towns, and in the rural districts of the United States. Indeed, the healthfulness of the country as compared with the cities, is in such marked contrast in this respect, that instead of the percentage of all deaths being greater under 5 years of age,

as in cities, the percentage is largely reversed; and even when the whole annual mortality of the United States is considered in the aggregate, the small mortality among children in the rural districts is sufficient to overcome the unfavorable reports of cities, and presents the following proportions, as shown by the U. S. Census.

<i>Census.</i>	<i>Total Mortality of U. S.</i>	<i>Mortality under five years.</i>
1850	323,272	123,211
1860	392,821	168,285
1870	492,263	203,213

It is, therefore, fair to infer from these data, which confirm individual experience, that there are causes operating in cities, unfavorable to the health and lives of children, that do not exist, or manifest themselves so disastrously, in the country. The causes that enfeeble or destroy human life in infancy are so manifold—constitutional, moral, and hygienic—that I will not attempt to enumerate them here; they are patent to all reflecting minds, and are constantly referred to in health reports.

That a considerable percentage of the infantile mortality of cities could, under more favorable circumstances, be prevented, is, I believe, the settled conviction, not only of physicians, but of the parents of these innocent victims.

A great part of this mortality, which I believe to be avoidable, occurs in what is known as the "heated term" (a period of special dread to parents with young children), comprising the months of June, July, August and September.

Whenever the thermometer rises and remains for any considerable length of time above 80 deg., derangement of digestion among infants living in such an atmosphere, is very liable to occur. Milk and all animal substances used as food, rapidly deteriorate in quality in regions of high temperature, and unless great care is taken, become unfit diet for infants. The infantile stomach is particularly susceptible, and the child by its sufferings will speedily show the bad effects of the least departure from pure, fresh and wholesome food or water. Persistence in the use of food that has caused disordered digestion, is sure to develop cholera infantum or some other grave form of disease. High temperature is everywhere recognized as one of the chief provoking causes of diseases of stomach and bowels, particularly

among children under two years of age, whether nursed at the breast or artificially fed. These diseases in their inception, are frequently mere disturbances of digestion, caused by heat, or by the deterioration of food, or the unsuitableness of their diet.

According to the weekly mortuary reports of our large cities, the diseases of this class alone are referred to as the cause of over 25 per cent. of all deaths occurring during the summer months; and the mortality among children under five years of age alone, increases the death rate in cities from one-fourth to one-half over the other months of the year.

As heat seems to be the constant attendant, if not the chief cause, of the "Summer Complaints" of children, and consequent great mortality among them, it is obviously an element to be taken into special account, and therefore desirable to provide, at least for those who are actually sick, quiet apartments or homes where they can have free ventilation and pure air of a moderate temperature.

Whenever these conditions can be secured for such patients, their digestive functions are quickly restored, and the child is no longer sick. The free excursions of a day to the country or the public parks, for the poor with their sick childreu, recently inaugurated in the City of New York and in Philadelphia, will, if the exposure and fatigue is not too great for the suffering little ones, be of infinite service to them, restoring health to many a languishing child, that may be thus rescued, to live and bless the promoters and benefactors of this charity.

At all events, this movement has in a special manner directed attention to the great want, and to the dangers of infantile life in our cities. But the measure does not go far enough. The child has to return at night to its home in the heated city, which is perhaps a small, crowded, badly ventilated room, with furniture and clothing saturated with foul smells, where it will soon lose any benefits it may have derived from the day's airing.

If these excursions prove to be of any benefit to sick children, as I believe they will, how much more positive and substantial a result would be gained by a residence of a couple of months in the country, where pure air, good water and

wholesome food, with out-door life, could be enjoyed until the oppressive warm season should have passed.

At first it would seem impossible for the poor to avail themselves of any mode of life—even if it should prove efficient for the preservation of the lives of their children—that must take the child with its mother or nurse, away from their homes and out of the city.

But perhaps the first point of importance to be settled in such a question is, would a removal from the city to a healthy rural district preserve the lives of any considerable number of children who if not removed would perish? This inquiry will be promptly answered by nearly every one, familiar with the course and treatment of infantile diseases, in the affirmative.

If then the measure proposed has real merit, and gives reasonable promise of lessening infantile mortality in cities, it is the duty of some one to point out a feasible plan for carrying it into practice.

Is it probable the poor would avail themselves of such means as are here suggested for the preservation of their children, at a nominal cost or without expense, when it would disarrange their ordinary domestic plans, and separate the wife temporarily from the husband, to whom her services are essential in the mode of life?

My judgment is, that the parental instinct will always be found equal to the necessities of the occasion, ready to accept and endure any temporary inconvenience, and to act in accordance with the best matured judgment of the profession, for the preservation of the lives of their children.

Next, what kind of an institution or scheme commensurate with the wants of a large city in this regard, could be inaugurated, that is really practicable and worthy of the endorsement of the medical profession, the encouragement and patronage of legislators and philanthropists?

I believe that a Free Park or Camping Ground, a sort of Sanitarium of one or two thousand acres or more in extent, selected with reference to its healthfulness—at an elevation above malaria—its accessibility, the abundance of pure water, with well shaded walks and play grounds, to be improved by cheap

tenements free to all who have such children as a summer residence, would in a great measure supply the desideratum.

The rich can always leave the cities and find healthy country retreats for their children, but the poor cannot without aid. No special interest has hitherto been manifested by any city for the health of the families of this class of the community, and no boarding houses or summer resorts suited to the wants of the poor, as far as I am informed, have ever been opened, and it is very questionable if they, with their manners and style of dress, could, at present, find accommodations in any considerable number near any of our cities.

Where could sites suitable for the purposes indicated be found? I would answer, that a search will develop the fact that there are plenty of them sufficiently accessible to all our cities,

A situation on navigable water, or on a line of railroad, should be preferred. Elevation, too, is particularly desirable, as it removes the danger from malaria, and secures a cooler temperature for the greater part of the 24 hours.

Every 400 feet of altitude above tide in this region, approximates to being in a temperature equal to that found at one degree of N. Latitude. It has been ascertained that the thermometer falls one and a quarter degree for every 300 feet of perpendicular ascent.

It is probable that the best results would be obtained for a sanitarium of this kind on some elevated ridge or mountain spur, above the line of malarial influence, where the air is pure and cool, the water good and abundant, where provisions are cheap, and where the normal temperature during the summer months does not for any considerable period of the day, range above 85 deg.

I feel that it is the duty, not only of large cities, but of individual States and the nation, to do whatever is possible to preserve the lives of the great army of innocents that are now annually sacrificed by a disregard of the laws of health, and the impecunious condition of a majority of parents of the laboring class in our large American cities, who are unable to remove them even when sick, to the country during the heated term.

I therefore suggest as a measure to meet this urgent want,

that each of our large cities secure one or more extensive tracts of land suited to the purpose, in an elevated region, and improve them in a manner suitable for a *Free Park* for the purposes here indicated.

Special care should be taken with all the improvements, so as to insure free and complete ventilation: good underground drainage should be made so as to keep the Park free from any annoyance from closet deposits, slops and waste water.

The parks should be under the immediate supervision of a medical and civil police, to preserve order and salubrity, and should either be so large or so numerous as never to be crowded (as that would establish the evils of city life); and all the improvements of the grounds should be made with a view to encourage and enable the children to be kept most of the time in the open air.

The grounds should be properly laid out with shady walks and drives, and improved in every way that could conduce to health, by the erection of cabins, cottages and boarding houses, for the accommodation of mothers and nurses, with their sick children, during the summer months.

It might and would be proper for cities to contribute means to send patients to the Park, and in some cases support by contributions, sick and destitute children and their mothers while there.

The opening of Free Parks as summer resorts for the poor is, I believe, entirely feasible, and in a humanitarian view deserving of the most serious consideration. To the statesman, the measure must present an encouraging prospect for the preservation of human life, the increase of population, and national prosperity.

When we consider that the census of 1870 shows that there is in the city of New York but one child under 15 years of age to every woman between the ages of 15 and 50, when there ought to be three, this question assumes a still greater importance.

In the selection of suitable sites for such parks, much valuable information as to elevations, temperatures, humidity, &c., of

the various localities near our Atlantic cities, may be had by consulting the records of the U. S. Signal Service Bureau.

My idea is, that the Park should be free to all who have sick children, and that persons while there should be permitted to live in tents or cottages, and in such style as their means and tastes might justify, if they do not violate the laws of health, or incommode their neighbors—the main purpose of the institution being to secure, by a healthy rural residence, the restoration to health and the preservation of the lives of the children of the poor, suffering from, or threatened by, diseases incident to, and aggravated by, the excessive heats of summer in cities.

It has long been the practice of city physicians to send their young patients to the country during the summer, whenever their parents can afford the expense, as almost the only means of saving their lives.

At Oakland, on the Baltimore and Ohio R. R., where the elevation is 2,700 feet above tide, and at least 1,700 above malaria, there were on the 18th of July, 12 or 15 infants, with their mothers or nurses, sent there by physicians of Baltimore, Washington, Cincinnati and other cities, in a most debilitated and dangerous condition from cholera infantum, all of whom made recovery without the aid of medicine.

The physicians of the place, Drs. McComas and Bartlett, the first of whom has practised there for 13 years, corroborate these statements, and further assure me that cholera infantum, as a disease, is unknown among the children of the resident population.

Although the Glade region of the Allegheny Mountains is undoubtedly healthy and would possess many advantages for a summer residence, I do not think that I would recommend the selection of a site for a park of the kind suggested, so remote from the Eastern cities, or at a point where the rainfall is so great during the summer.

It is probable that a region, or regions, every way suitable for the purpose, can be found at points either on the Blue Ridge or some of the mountain spurs nearer our coast cities.

The views advanced in this paper, I have, in various ways, and at different times, brought to the attention of physicians and

others, and here present them more in detail, in the hope that they may be subjected to the judgment of others, and to assist in solving the important problem of how to lessen the great waste of human life that is annually taking place among young children in American cities.

INFANT MORTALITY.*

In the present number is published an article on this subject by Dr. Toner, which deserves to be read on account of the many facts there presented, as well as by reason of the remedy proposed being quite new and apparently feasible. Although his reference to points in the Allegheny and Blue Ridge mountains possesses a local interest to the residents of eastern cities which it does not have for us, it is yet so much added to disease topography, and can not in itself be considered useless information, while it gives point to his project by illustration, and shows his good faith and his confidence in the merits of his plan; else why commit himself by recommending a site, when he might have left that to others, and, in case of failure, put the blame on them.

The question of how infant life may be best saved to the country and to the world, is one of the gravest importance, yet one which has been neglected perhaps more than any other question in political economy. Legislators are constantly busy with considering plans to reduce taxes and tariffs, to increase commerce, to build railroads in new territory, and gain population by offering liberal inducements to immigrants; do they ever stoop to ponder the value of a human life, of the immense value of the myriads of infants who yearly die for want of those proper hygienic surroundings which might be supplied by a little legislative interference? How much better to save that which we have native born than to go over the seas for population?

On Boards of Health lies one part of the responsibility; they are supposed to know the proper means for preventing disease:

*Editorial from the *Northwestern Medical and Surgical Journal*, Nov. 1872.

do they know how to prevent this? In part, yes; in part, no. But will our legislators act on the plans suggested by the Health Boards? We fear that dollars and cents in the present will be allowed to outweigh the prospect of citizens saved to the commonwealth in the future, as well as the burden of sorrow which might be saved to a poverty-stricken widow over the loss of her infant son, perhaps the only image she has of the one who *was* her support. Who can tell but that in the brain of some little waif cast upon the mercy of the state, may be cells capable in a future day of evolving thoughts which shall enrapture the heart of the civilized world with their poetic beauty; or shall save his country from bondage by their wisdom? No matter if these children now be lowly, if cherished until manhood they may one day become great and good and useful; their lives are worth as much as those of the children that play with pearls and diamonds. In one sense the rich can guard their children against disease by food, and clothes, and care, and change of residence when necessary; but do they ever think that there are many diseases to which their children will ever be liable while those diseases are allowed to grow in and shed abroad their germs from the neighboring shanty, a very hot-bed for disease and faithful servant of death?

To the improvement of the condition of the poor, and to the enforcement of sanitary laws in their midst, we must look for one means of checking the present slaughter of the innocents. What can be done to ventilate the hundreds of shanties in all our large towns, into which human beings crowd until one full breath of each would almost consume the amount of oxygen originally there? Into these shanties a breath of pure air would almost be ashamed to enter; but the possibility of any such intrusion is prevented in the winter by double doors, by banking earth up around the walls, and by plugging and cementing every crack and crevice. If their shanties were open, however, the inmates would freeze. Which is the least of the two evils? Neither; for each is death; yet how simple a matter it would be to ventilate these houses. Have an air chamber built in the stove, and opening into the room at its top, while to its side or bottom should be attached a pipe open-

ing in pure air outside the shanty. The air would enter through this pipe, be heated in the chamber within the stove, and then enter the room at a rate which could be regulated by a damper, while the draft of the stove would suffice to carry off the impure air. Whoever would add such a ventilator to the stoves of the people at a trifling cost, would be a public benefactor in reality. But what has this to do with infants more than adults? A great deal. While adults have established a tolerance to the poison of impure air, in common perhaps with alcohol, opium, or other poisons, the infant has not. Its delicate organism is deeply affected by the poisonous air, and many troubles arise, more particularly of the nervous system; and it is not an insignificant fact that just in this class of patients, the vast majority of the cases of epidemic cerebro-spinal meningitis which have been observed in St. Paul in the last two years, have been found.

Let our children have pure air, as the God who made such volumes of oxygen intended. They must have it, or their bodies will either perish or be cursed with a lifelong lack of vitality; their minds be dwarfed and obscured; and their moral nature blackened, perhaps beyond all redemption. The idea of a healthy morality in children steeped in impure gases is as absurd as the idea of a healthy body. "The breath of life" was taken from the Garden of Eden, and was typically pure; when man by it became a living soul, that soul also acquired, by constitution, a necessity for pure air to carry on its nutrition and remain a healthy, *i. e.* a pure soul. Had man never fallen, we may well doubt whether he would have remained as pure as created, if placed in an atmosphere loaded with impure gases and the noisome exhalations from decomposing filth. Then in his degenerate condition how can his soul escape the ugly blackness of sin and death, when supplied only with the atmosphere of death? This question of air is one for moralists as well as for the promoters of hygiene. We are glad that on this very principle of supplying a sufficiency of pure air in the buildings occupied by the poor, a certain temperance movement in England has met with flattering success. It is an evidence of the triumph of physiological truth, where all the brute force

total abstinence pledges in the world could never have helped the condition of a single man. The body first is mended by supplying good air for a stimulus and food; this diminishes or destroys the natural craving for a stimulant, which before had to be supplied by alcohol; the ultimate effect on the moral nature of the man can well be conceived, for now the air he breathes by his own fireside supplies that inevitable demand of the system, which before he in vain attempted to satisfy by steeping himself in alcohol at a neighboring saloon.

There is another place besides their homes in which the children, if they have been fortunate enough to reach a certain age, must be supplied with air; and this is at school. Even if private dwellings cannot be ventilated by law, school-houses can, and hence want of purity of the air, such as is generally found, is the more inexcusable. It is a shame that those vested with the control of the public schools do not make it their special business to insist on *efficient* ventilation.

In looking over the recent monograph of Dr. Clymer on *Cerebro-Spinal Meningitis*, we could not help being forcibly impressed by the constant recurrence in those cases reported in the Appendix (New York epidemic of 1872) of such expressions as "sinks untrapped," "sewer gases escaping into the room," etc. And he states that either such conditions were found in all the houses which had been visited by the disease, and for the most part the houses were crowded tenement houses in addition to their defective sewers, or the situation was where "original water-courses had been dammed up by the filling up of streets and avenues, and over the adjoining water-saturated land. Most of the cases of the disease were grouped on and about the made land, originally marshes." "Basements over these marshy places are never dry, and the walls are often covered with cryptogams."

Dr. Morris, City Sanitary Inspector, says of the same epidemic: "Wherever we have carefully examined the local conditions, it has been found that the drainage of the premises had been faulty, or that the immediate surroundings have presented such conditions as must necessarily give rise to some form of disease,—cellars containing decomposed or decomposing vege-

tables, garbage, or other filth, in a putrefactive condition, and privy vaults located beneath sleeping rooms, windows in cul-de-sacs, where there were no free currents of air. The most usual defects were connected with house drainage. These cases are not confined to the abodes of the dirty, squalid, and poor, but houses of a better class with brown-stone fronts have furnished their victims. There can be no doubt that over-crowding, with its attendant evils, accumulation of ordure, refuse and various kinds of filth, absence of a proper supply of fresh air, and personal neglect, invite and aggravate certain epidemic tendencies, and consequently we find that the largest proportion of cases of cerebro-spinal meningitis have been found where these conditions obtain."

That these poisonous gases are more effective when applied to children, is shown by the fact that of the 469 deaths reported from January 1 to May 31, 1872, 216 were under 5 years of age, 99 between 5 and 10, and 49 between 10 and 15.

In our Northwestern cities the greater prevalence and fatality of epidemic meningitis among children has also obtained. The disease has likewise, in St. Paul at least, shown itself very frequently in dwellings located on marshes and made ground; and as to sewer and sink traps, it is to be feared there are almost none in use in the city, and far too many houses are liable to be visited by this or some other epidemic destroyer for their neglect of such safeguards. Notice that Dr. Morris says "such conditions as must necessarily give rise to *some* form of disease." Another form to which these conditions are capable of giving rise, there seems to be no room for question, is cholera infantum, as that term is commonly employed. An epidemic of one form of digestive trouble which is usually included with cholera infantum in mortuary reports, viz.: enterocolitis with meningitis, we remember to have seen distinctly localized in one branch of a children's hospital, where the sinks were untrapped and the water-closet waste-pipes clogged. Traps were placed in the faulty sinks, the waste pipes were cleaned, and the epidemic subsided.

Excessive heat and improper food are the other causal agents which are accused of taking a part in the death of infants in

large Eastern cities. During the month of August last, the highest daily mean of the thermometer at this point was 82 deg., while the average was 69 deg. Surely this cannot be called *excessive* heat, and therefore can be dismissed as being a principle causative agent of the 84 deaths under 5 years, out of a total of 111 in St. Paul, and the 62 under 5 years, out of a total of 89 in Minneapolis. The supply of proper food, too, ought to be, and is, better than in the larger cities, for here, even if the child be bottle-fed, in a large proportion of the cases its parents keep a cow and supply it milk of uniform quality and always fresh. Where then must we look for the cause which has been so successful in making little graves during the summer just past? A number certainly proportionally equal to that shown by any of the eastern cities.

To speak plainly and without paraphrase, what cause can be so rationally assigned as impure air resulting from defective, untrapped sewers blowing their foul, pestilential vapors through the houses they were intended to cleanse; or no sewers, and undrained swamps made more noxious than in their original state by the city refuse allowed to accumulate in them.

One other possible cause we will barely mention. The unnatural high-pressure system under which Americans, and especially Western men, live, can scarcely help showing its exhaustive effects in their offspring. The following suggestive paragraph occurs in the *New York Tribune*: "The proportion of children among those stricken down by the recent heat, was appalling. Yet the heat was not worse than our fore-fathers bore and lived to tell us of; and it is quite true that the children carried about with them neither exhausting cares in mind, nor too hardly worked bodies, but they had nothing to oppose to the fiery test but flaccid limbs and rasped nerves bequeathed to them by either liquor-drinking ancestors, or those who make the stimulant of energy and over-work take the place of liquor."